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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,910	03/08/2001	Mitsuru Higuchi	OGA-181-USAP	5533

7590 08/22/2003  
Ronald R. Snider  
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EXAMINER

NATNAEL, PAULOS M

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 08/22/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/800,910

Applicant(s)

HIGUCHI ET AL.



Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by

**Takebe, U.S. Pat. No. 6,356,314.**

Considering claim 1, the claimed

a) a circuit for generating an interlaced scanning signal for display of an image on a TV monitor from an image signal obtained by an image pickup device is met by the CCD camera 2, Fig.11;

b) and a progressive resolution conversion circuit for generating a non-interlaced scanning signal with higher vertical resolution than a frame signal for a TV monitor by reading and overlapping same field signals for interlaced scanning, is met by the frame memory 20, Fig. 11;

Considering claim 2, the claimed wherein said progressive resolution conversion circuit can generate a non-interlaced scanning signal for one frame by reading one field signal three times or more, is met by the disclosure that " the address pointer is incremented once for every N times there is a read dot clock signal CKr, so the same data is outputted for N times in a row for the read dot clock signal CKr. As a result each lines is magnified by N times in the horizontal direction... (col. 25, line 24+)

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takebe**, U.S. Pat. No. **6,356,314**.

Considering claim 3, the claimed

b) a frame memory for storing a frame signal for non-interlaced scanning, is met by Frame memory 20, Fig.11;

c) a write/read control circuit for reading twice a field signal in said field memory at a double speed of a write speed for the signal, temporarily writing the signal in said frame

memory, and controlling the frame signal in said frame memory such that the frame signal can be read twice at a double speed of a write speed of the frame signal, is met by the Controller 10 and Read Clock Generation circuit 5/Write Clock Generation circuit 11, Fig.11;

Except for;

a) a field memory for storing a field signal for interlaced scanning;

Regarding a), Takebe doesn't specifically disclose a field memory. Takebe discloses frame memories. However, Takebe does process both by field and frame and it is well known that two fields equal a frame, it would have been obvious to the skilled in the art at the time the invention was made to provide a field memory to store temporarily the odd-numbered and even-numbered fields that are processed before the signals are sent to the frame memory 20 for resolution conversion processing, in order for the frame memory 20 to perform an efficient operation instead of being burdened with both storing and resolution conversion processing.

Considering claim 4, the claimed b) a write/read control circuit for controlling the field signal in said field memory such that the signal can be read  $n$  times at a speed  $n$  (integer) times as fast as a write speed for the signal, is met by the Controller 10 and Read Clock Generation circuit 5/Write Clock Generation circuit 11, Fig.11;

Except for;

a) field memory for storing a field signal for interlaced scanning;

Regarding a), see rejection of claim 3 (a).

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Hebert et al., U.S. Pat. No. 6,101,038 discloses infrared audio/video interface for head-mounted display.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 6:30am -3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Paulos Natnael  
June 13, 2003

  
JOHN MILLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600